

REMARKS

Claims 1-12 are pending in the application. Claim 1 has been amended. Claims 2-12 have been canceled without prejudice. Claims 13-36 have been added. No claims have been allowed.

Formal Drawings

Formal drawings are submitted herewith as required. Applicants respectfully request entry of the formal drawings in the application.

Claim Objections

Claims 1, 4, 6, 10, and 11 were objected to because of various informalities. Claim 1 has been amended accordingly. Claims 4, 6, 10, 11 have been canceled herein without prejudice. Applicants respectfully request withdrawal of the objections.

Rejections under 35 U.S.C. § 102

Claims 1-3 were rejected as being anticipated by Huang et al., U.S. Patent 6,058,309, hereinafter "Huang". Claims 2 and 3 have been canceled without prejudice. Applicants respectfully submit that claim 1 as amended is not anticipated by Huang. Huang teaches network directed system selection for cellular and PCS enhanced roaming. Specifically, Huang states that:

A mobile station outside its home market, when attempting to register or initiate a call, will attempt to connect to a remote service provider in the geographic region where it is located in the same manner as it would in the home market. The remote service provider will contact the home service provider seeking, among other things, service information and account status. In the event that the home service provider has more favorable arrangements with another service provider in the geographic region where the mobile station is located, the home service provider will transmit redirection instructions to the remote service provider which is transmitted to the mobile station. The redirection instructions direct the mobile station to attempt to establish communication with an alternative preferred service provider in the geographic region where the mobile station is located. Instructions may also be sent identifying what the mobile station should do in the event

communication with the alternative preferred service provider cannot be established. (Emphasis added)

(Abstract)

As clearly set out in the underlined portions of the Abstract cited above, Huang performs redirection of a mobile station to another service provider by sending specific redirection instructions to the remote services provider. The specific redirection instructions are transmitted to the mobile station to be acted upon. These are indicated to be special purpose instructions. For example, the instructions may also identify what the mobile station should do in the event communication with the alternative preferred service provider cannot be established.

Further, in order for the described method of Huang to work, Huang requires that 1) the remote mobile switching center (MSC-2) have the special capability of receiving and interpreting the special purpose instructions, and 2) the user has not disabled the special capability of the handset to participate in the method. For example, column 4, lines 8-12 and column 6, lines 8-12 state “If the computer associated with the HLR determines that another system is preferable, MSC-2 is NDSS capable, and the subscriber has not suppressed the NDSS override of the handset’s system selection procedure ...”

Applicants respectfully submit that their invention is not anticipated by Huang.

Applicants’ claim 1 as amended recites:

A method for controlling wireless network traffic,
comprising:

determining when a roaming mobile station initiates a registration attempt with a non-preferred network, wherein initiating comprises the mobile station sending a message to a Home Public Mobile Network (HPLMN) to update its location;
and

sending a response to the mobile station indicating that the registration attempt is terminated, wherein the response comprises an error message.

Applicants submit that Huang fails to teach or suggest at least sending a response to the mobile station indicating that the registration attempt is terminated, wherein the response comprises an error message. On the contrary, Huang teaches away from

terminating the attempt with an error message by teaching sending special instructions to a specially enabled MSC-2 and handset when direction to a new network is to be performed. For this reason, Applicants respectfully submit that claim 1 is patentable over Huang.

Claims 13-20 depend from claim 1 and include further limitations thereon. Therefore, Applicants submit that claims 13-20 are patentable over Huang for the same reasons discussed with reference to claim 1.

Claim 21 recites:

A system for directing roaming network traffic, the system comprising:

a Home Public Mobile Network (HPLMN) that is a home network of a mobile station;

a Visited Public Mobile Network (VPLMN) configured to communicate with the HPLMN via a signaling network, wherein the mobile station is roaming when in the VPLMN; and

a traffic redirection node configured to monitor signaling between the HPLMN and the VPLMN, including determining when the mobile station is roaming in the VPLMN and whether the VPLMN is a preferred network, wherein if the VPLMN is not a preferred network, the HPLMN sends a message to the mobile station to terminate a current transaction between the VPLMN and the HPLMN.

Applicants respectfully submit that such a system is not taught or suggested by Huang. Huang completely fails to teach at least a traffic redirection node that monitors as claimed. For this reason alone, Applicants submit that claim 21 is not anticipated by Huang.

Claims 22-25 depend from claim 21 and include further limitations thereon. Therefore, Applicants submit that claims 22-25 are patentable over Huang for the same reasons discussed with reference to claim 21.

Claim 26 recites a computer-readable medium having instructions stored thereon which, when executed in a wireless communication network, cause elements of the network to control wireless network traffic. Controlling comprises limitations similar to those recited in claim 1. Applicants submit that Huang fails to disclose a computer-

readable medium as claimed for the same reasons discussed with reference to claim 1. Therefore, Applicants submit that claim 26 is not anticipated by Huang.

Claims 27-34 depend from claim 26 and include further limitations thereon. Therefore, Applicants submit that claims 27-34 are patentable over Huang for the same reasons discussed with reference to claim 26.

Claim 35 recites a wireless communication method as follows:

A wireless communication method, comprising:
a mobile station sending a message to a Home Public Mobile Network (HPLMN) to update its location, wherein the message is used to determine whether the roaming mobile station is initiating a registration attempt with a non-preferred network; and
if it is determined that the mobile station is initiating a registration attempt with a non-preferred network, the mobile station receiving a response from the HPLMN indicating that the registration attempt is terminated, wherein the response comprises an error message.

Applicants submit that Huang fails to teach or suggest that if it is determined that the mobile station is initiating a registration attempt with a non-preferred network, the mobile station receiving a response from the HPLMN indicating that the registration attempt is terminated, wherein the response comprises an error message. On the contrary, Huang teaches away from terminating the attempt with an error message by teaching sending special instructions to a specially enabled MSC-2 and handset when direction to a new network is to be performed. For this reason, Applicants respectfully submit that claim 35 is patentable over Huang.

Claim 36 recites;

A wireless communication system, comprising:
a mobile station configurable to send a message to a Home Public Mobile Network (HPLMN) to update its location, wherein the message is used to determine whether the roaming mobile station is initiating a registration attempt with a non-preferred network; and
a HPLMN configurable to determine that the mobile station is initiating a registration attempt with a non-preferred network, and further configurable to send an error message to the mobile station indicating that the registration attempt with the non-preferred network is terminated.

Applicants submit that Huang fails to teach or suggest at least a HPLMN configurable to determine that the mobile station is initiating a registration attempt with a non-preferred network, and further configurable to send an error message to the mobile station indicating that the registration attempt with the non-preferred network is terminated. On the contrary, Huang teaches away from terminating the attempt with an error message by teaching sending special instructions to a specially enabled MSC-2 and handset when direction to a new network is to be performed. For this reason, Applicants respectfully submit that claim 36 is patentable over Huang

Rejections under 35 U.S.C. § 103

Claims 6, 7, and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Huang.

Claims 4, 8, and 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Sorenson et al., U.S. Patent No. 6,463,298, hereinafter “Sorenson”.

Claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Mittal et al., U.S. Pub. No. US 2002/0160763 A1, hereinafter “Mittal”.

Claim 11 was rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Seppanen et al., U.S. Patent No. 5,903,832, hereinafter “Seppanen”.

Claim 12 was rejected under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Allison et al., U.S. Pub. No. US 2003/012991 A1, hereinafter “Allison”.

Claims 6, 7, 9, 4, 8, 10, 5, 11, and 12 have been canceled without prejudice herein. However, Applicants have reviewed the cited art and respectfully submit that the claimed invention is patentable over the cited references, either considered separately or in any combination.

Sorenson was cited as disclosing a method of acquiring an alternate communication system upon failure of reverse link communication. Sorenson teaches a wireless communication device automatically switches to an alternate, available system when it is unable to complete a call origination attempt. The wireless communication device stores a list of preferred communication systems, etc. (Abstract). Sorenson thus requires that the original attempt to complete a call fail. Sorenson also requires that the

wireless communication device store a list of preferred communication systems. Sorenson provides no teaching whatsoever regarding determining when a roaming mobile station initiates a registration attempt with a non-preferred network. Therefore Applicants submit that the claims are patentable over Sorenson. Moreover, Applicants submit that Sorenson does not supply the deficiencies of Huang as previously described. Huang in combination with Sorenson does not yield the invention of claims 1 and 13-36.

Mittal was cited as disclosing providing operation parameters to a mobile station. Mittal describes an over-the-air (OTA) method (e.g., SyncML) for parameters on a handset. Mittal does not teach or suggest a method, system or medium as in claim 1, 21, and 26. Mittal also does not supply any of the deficiencies of Huang as previously described. Therefore Applicants submit that the claims are patentable over Mittal, and that Mittal in combination with Huang does not yield the invention of claims 1 and 13-36.

Seppanen is cited as disclosing a mobile station having enhanced system selection capability. Seppanen is limited to describing capabilities and characteristics of handsets. Seppanen contains no teaching whatsoever regarding the invention as claimed in claims 1 and 13-36. For example, Seppanen does not teach or suggest determining when a roaming mobile station initiates a registration attempt with a non-preferred network as claimed, sending a response to the mobile station indicating that the registration attempt is terminated, wherein the response comprises an error message, as claimed. Seppanen further fails to disclose or suggest a system as in claim 21. Seppanen fails to supply the previously described deficiencies of the other cited references, including Huang. For these reasons, Applicants respectfully submit that claims 1 and 13-36 are patentable over the prior art, including Seppanen and combinations of cited references that include Seppanen.

Allison is cited as disclosing invoking an Update Location message on demand. Allison describes a routing node that performs location management signaling operations associated with mobile subscribers. The routing node may perform signaling message routing typically performed by a signaling system 7 (SS7) signaling transfer

point (STP). (Abstract). The Update Location message is known the SS7 protocol, and is therefore handled by Allison's routing node.

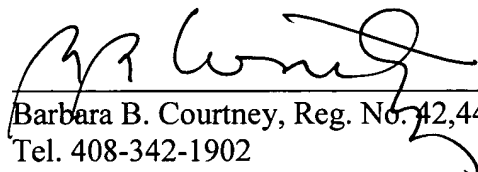
Allison contains no teaching whatsoever regarding the invention as claimed in claims 1 and 13-36. For example, Allison does not teach or suggest determining when a roaming mobile station initiates a registration attempt with a non-preferred network as claimed, sending a response to the mobile station indicating that the registration attempt is terminated, wherein the response comprises an error message, as claimed. Allison further fails to disclose or suggest a system as in claim 21. Allison fails to supply the previously described deficiencies of the other cited references, including Huang. For these reasons, Applicants respectfully submit that claims 1 and 13-36 are patentable over the prior art, including Allison and combinations of cited references that include Allison.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1 and 13-36 are in condition for allowance. The allowance of the claims is earnestly requested.

Respectfully submitted,
Courtney Staniford & Gregory LLP

Date: October 6, 2005


Barbara B. Courtney, Reg. No. 42,442
Tel. 408-342-1902